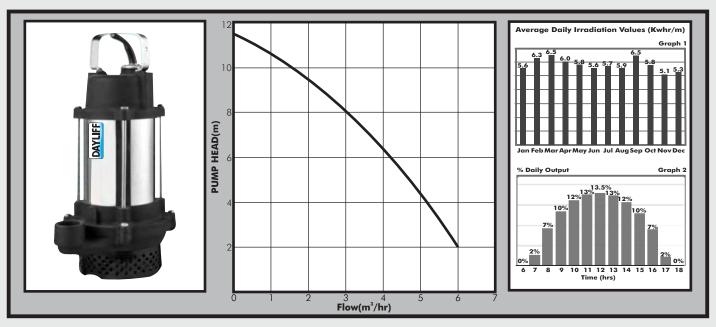




# Submersible Centrifugal Pumps



#### DIIMD

DAYLIFF DDWS is a PV solar powered submersible centrifugal closed impeller DC pump for water supply, irrigation and drainage applications. Material of construction is aluminium impeller, cast iron pump body, double mechanical seal, NBR oil seal and AlSI301 stainless steel strainer and casing. Pumps feature an inbuilt controller that provides thermal protection, over/under voltage protection, dry running protection, seizure and humidity protection and are supplied complete with 3m power cable and 1.5m solar PV cable with MC4 connectors.

# **MOTOR**

The pump is fitted with a permanent magnet DC brushless motor specifically designed for maximum efficiency from solar power. The solar array must meet minimum input voltage required and it can be directly connected to the pump thRough an MCB isolator.

# **POWER OUTPUTS**

Pump output curve is given at standard test conditions of  $1000W/m^2$  solar irradiance and  $25^{\circ}C$ . Output will vary throughout the year depending upon prevailing irradiation levels. For estimated daily outputs at continuous pumping, multiply the indicated output at the duty point by the daily radiation given in Graph 1. For indicative purposes, factors of 1.1 can be applied for hot arid areas and 0.9 for temperate high-altitude areas in the Tropics. Output will vary throughout the day as a proportion of the estimated hourly irradiation as shown in Graph 2.

**Enclosure Class:** F Insulation Class: IP68 Speed: 3000rpm

## **OPERATING CONDITIONS**

**Pumped liquids:** Thin, clean, chemically non-aggressive liquids without solid particles or fibres.

Max. Liquid temperature:  $+40^{\circ}$ C

Max. Particle Size: 0.2mm Max. Immersion Depth: 5m

### **PUMP DATA**

| Model           | Motor<br>Power<br>(W) | Input<br>Voltage<br>(V) | Peak<br>Voltage<br>(V) | Open Circuit<br>Voltage<br>(VOC) | PV<br>Configuration |       | Dimensions (mm) |     |      |
|-----------------|-----------------------|-------------------------|------------------------|----------------------------------|---------------------|-------|-----------------|-----|------|
|                 |                       |                         |                        |                                  |                     |       | w               | Н   | (kg) |
| <b>DDWS 220</b> | 220                   | 24                      | ≥30                    | <50                              | 1x545W              | 1 1/4 | 265             | 465 | 11   |

